

Amendments to the Specification

Under 37 C.F.R. § 1.121(b), please amend the specification as follows:

Please delete the paragraph on page 1, lines 5-14, below the heading CROSS-REFERENCE TO RELATED APPLICATIONS, and replace it with the following amended paragraph:

This application is a division of U.S. Patent Application Ser. No. 10/131,539, filed April 23, 2002, now-~~allowed~~ U.S. Pat. No. 6,716,882, which is a division of U.S. Patent Application Ser. No. 09/648,492, filed Aug. 25, 2000, now U.S. Pat. No. 6,399,663, which, in turn, was a division of U.S. Patent Application Ser. No. 09/187,676, filed Nov. 6, 1998, now U.S. Pat. No. 6,110,916, which, in turn, was a division of U.S. Patent Application Ser. No. 08/782,783, filed Jan. 13, 1997, now U.S. Pat. No. 5,834,439, which, in turn, was a division of U.S. Patent Application Ser. No. 08/171,232, filed Dec. 20, 1993, now U.S. Pat. No. 5,674,908, all of which are incorporated by reference herein to the extent not inconsistent herewith.

Please delete the paragraph on page 18, lines 22-31, below the heading Example 2: Synthesis of N,N,N',N'-tetrapalmylspermine (2), and replace it with the following amended paragraph:

To a suspension of lithium aluminum hydride (900 mg, 23.7 mmol) in anhydrous tetrahydrofuran (80 ml) was added a solution of N,N,N',N'-tetrapalmitoylspermine (500 mg, 0.43 mmol) in anhydrous tetrahydrofuran (10 ml). The reaction mixture was refluxed for two days under argon. The excess lithium aluminum hydride was removed with sodium hydroxide (1 M, 5 ml). The organic phase was decanted and the flask washed twice with additional tetrahydrofuran (50 ml). The solution was dried (~~Na₂SO₄~~) (Na₂SO₄) and the solvent removed ~~in vacuo~~ in vacuo to afford almost pure desired tetraamine. This material was passed through a short-path silica gel bed (filtration) and

eluted sequentially with ethyl acetate and ethyl acetate/triethylamine (10%) to afford, after solvent removal, the desired product (313 mg, 82%).

Please delete the paragraph on page 20, lines 14-29, below the heading Example 8: Transfection of Jurkat cells, and replace it with the following amended paragraph:

For transfection of Jurkat cells in suspension, lipid and DNA (pCMVCAT) were diluted separately into 500 μ l aliquots of Opti-MEM I Reduced Serum Medium (GIBCO BRL; serum-free). These aliquots were gently mixed and incubated at room temperature for 15-45 minutes to form lipid-DNA complexes. For each transfection sample, 1×10^6 Jurkat cells were centrifuged in a microfuge tube. The cell pellets were suspended with the lipid-DNA complex solutions and transferred to wells of 12-well plates. Cells were exposed to DNA-lipid complexes for 4-5 hr under standard culture conditions, after which 0.5 ml growth medium containing 30% FBS, 150 μ g/ml Phorbol myristate acetate (PMA; Sigma Chemical Co., St. Louis, Mo.), and 3 μ g/ml phytohemagglutinin (PHA) were added to a final concentration of 10% FBS, 50 μ g/ml PMA and 1 μ g/ml PHA, respectively. After approximately 24 hr, one ml growth medium containing 10% FBS, 50 ng/ml PMA and 1 μ g/ml PHA was added to each well. Antibiotics were never present during lipid-mediated transfections. Cells were harvested at approximately 48 hr post-transfection by centrifugation. Cell lysates were prepared by resuspending cell pellets at 0°C in 1 M Tris-HCl pH 8.0 containing 0.1% Triton X-100 and 5 μ l aliquots were assayed for chloramphenicol acetyltransferase ("CAT")CAT activity.